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Farm Record Keeping and Application of Business Principles to Farming

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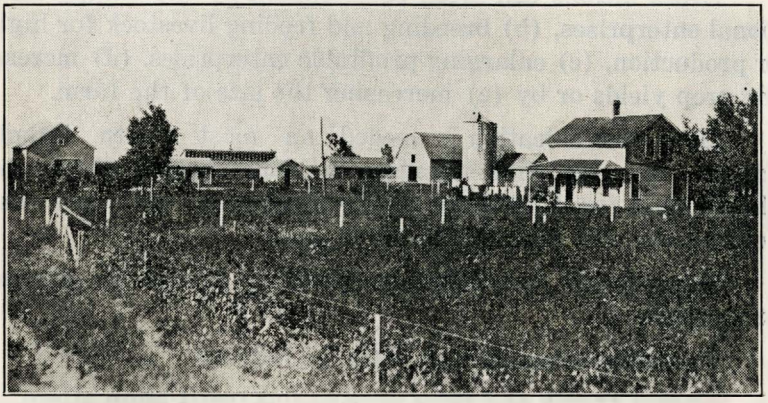
FARM RECORD KEEPING

AND

The Application of Business Principles to Farming

BY

M. R. Benedict and H. D. McCullough
Department of Farm Management



Buildings on a Well Equipped Diversified Farm

EXTENSION SERVICE
SOUTH DAKOTA STATE COLLEGE
BROOKINGS

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DIGEST

High priced land and high production costs will be the outstanding farm problems of the future.

A farm account book gives the facts needed for a study of the farm business.

Size of business, measured in terms of gross income, is an important factor affecting profits.

Gross income can often be increased by (a) adding additional enterprises, (b) breeding and feeding livestock for higher production, (c) enlarging profitable enterprises, (d) increasing crop yields or by (e) increasing the size of the farm.

More diversification is needed on most South Dakota farms. Diversification stabilizes the farm income, distributes the demand for labor more evenly throughout the year and reduces the cost of man and horse labor.

Many farms lack sufficient operating capital for efficient production.

Operating expenses can often be reduced.

Market trends and price fluctuations merit more attention than they have received. Cooperative effort will solve many marketing problems.

There is a wide difference in production costs on different farms in the same community.

Introducing new methods and practices requires time and patience.

Such a record as is shown is easy to keep and to summarize, and will give the farmer a better knowledge of his business.

FARM RECORD KEEPING

AND

The Application of Business Principles to Farming

BY

M. R. Benedict and H. D. McCullough
Department of Farm Management

How to make his farm return enough profit for a wholesome, worth while living and provide for moderate saving is the problem confronting every farmer to-day. Every farm family wants a comfortable home, schooling for the children, electric lights, running water, and the other comforts of life, but usually these things cannot be had unless the farm is made to pay as a business proposition. Farming is not and never has been a means of getting rich quickly or easily. It is a substantial and necessary occupation offering many advantages. On the other hand, it seldom has paid the farmer an adequate return on his actual farming operations. Many farmers have made reasonable savings as a result of the increase in land values, but constantly rising land values cannot be depended upon for profits indefinitely, and farming should be considered from the same business standpoint as any other industry. In other words, it should pay a reasonable return upon the capital and labor used in the actual farming operations.

High priced land and high production costs will be the outstanding farm problems of the future. The period of free land and heavy overproduction which followed the opening of the West is pretty well past. Production is increasing less rapidly than population, and the outlook for adequate prices for farm products is more encouraging than it has been. However, higher land costs and more expensive equipment will necessitate more businesslike and efficient methods of farming than have been common in the past.

No attempt is made here to cover the entire field of farm management. Neither is it possible to make positive statements that this or that plan will increase profits on every farm. Conditions vary widely in different parts of the state. The amount of capital invested and the ability of the operator to

manage the farm are important factors that cannot be changed at will. The aim of this circular is to help the interested farmer to keep a record of his business, to indicate how he may use this record in finding the strong and weak points in his plan of farm management, and to suggest principles that will aid him in reorganizing his farm for greater profits.

Before a farmer can hope to give any intelligent study to means of increasing his profits, he must know what his profit or loss is and have some knowledge of its sources. In other words, he must have some simple, effective record of his business, which includes an inventory of his livestock, feed, etc., at the beginning and end of the year, his receipts, and his expenses. As an aid and guide to those who wish to keep such a record of the farm business, a complete farm record for a South Dakota farm in 1921 is included in the latter part of this circular.

With such a record to guide him, the farm operator should be able to keep a record on his own farm and see how it measures up when judged by certain principles of successful farm management which are common to nearly all farms. Some of these principles will be discussed in the following pages.

SIZE OF THE FARM BUSINESS

By size of business is meant the total income of the farm rather than the number of acres or the amount of livestock. The total income of farms varies greatly, ranging from three or four hundred dollars on some farms to thousands of dollars on those having a large farm business. Mere volume of income does not measure profits as costs may be still larger. However, it is evident that if a farm brings in only a few hundred dollars a year, no matter how small the expenses are, there cannot be a satisfactory income left. A study of many farms indicates that in a majority of cases an effective remedy lies fully as much in finding means of increasing gross income at reasonable cost, as in finding ways to cut down expenses, though neither should be neglected.

Let us first, then, size up the gross or total income of the farm. Is it large enough so that with reasonable costs a fair income will be left? In many cases this gross income will be

found unreasonably small. What are the causes of a low gross income and how may they be modified and the income increased? Five of the chief causes of low income are listed here and will be discussed in order.

(a) The farm may be a one or two enterprise farm, depending almost wholly for its income upon cattle, wheat, or cattle and alfalfa seed. Often such a farm's gross and net income may be increased by adding one or two other enterprises as will be discussed later.

(b) The farm may be producing dairy products with cattle unfitted for dairy production, or beef with cattle unfitted for beef production. Cattle, hogs, poultry, in fact all classes of livestock, vary greatly in the amount of product they will produce from a given amount of feed.

(c) Some of the enterprises already in use on the farm may be handled on a larger scale to good advantage. This is often true of poultry, and has been true in many cases of the hog enterprise. Frequently, careful planning will show means of producing feed for a larger number of cattle than are now carried. In most cases, some of the enterprises can be profitably increased.

(d) Crop yields may be lower than those secured by the best farmers of the community. When this is the case, careful study of the methods and practices employed by the more successful farmers will nearly always be profitable.

(e) The size of the farm itself may be too small for the type of farming in which the operator is engaged.

Other remediable causes of too small a gross income will no doubt occur to those farming under the widely varying conditions of the state.

HOW GROSS INCOME MAY BE INCREASED

Additional Enterprises.—On a one or two enterprise farm, the gross and net income can usually be increased by adding additional enterprises.There are good reasons for this. Where the farm is practically all devoted to the production of one or two products, such as wheat or cattle, we have seasons of heavy demand for labor and horses, and other periods when

some of the men and horses may be idle. Having three or four main enterprises on the farm usually distributes the work more evenly throughout the year. It thus makes possible a greater volume of production. For example, a man who is growing cattle alone, can frequently add hogs and a cash crop such as alfalfa seed, without materially interfering with his cattle business. The size of the business can often be increased in this way without materially increasing the operating expenses.

In all cases where a cash crop is depended upon as a main source of income it is almost a necessity, if one is to carry on a safe type of farming, to provide some means of securing a fairly steady income during the year, allowing the returns from the cash crop to be used for paying loans, buying equipment, savings, etc. This continuous income can often be secured from a few dairy cows and a good flock of poultry.

Breeding and Feeding Livestock for Higher Production.— Increasing the productivity of the livestock already carried on the farm is a field offering considerable opportunity to the average farmer. Herds of cattle vary immensely in their production of butterfat or beef per year. For example, some dairy herds run considerably below the state average of 135 pounds of butterfat a year, and others average as high as 400 pounds or more a year. If dairy cows are kept on the farm in question it will pay to look into the production per cow. If this is low, the remedy probably lies in better breeding or better feeding, or more probably in both. The same principle applies to other classes of livestock although it is less easy to measure the effect of better feeding or better breeding in the case of beef cattle, hogs or sheep.

This does not necessarily mean the purchase of herds of purebred livestock. A few such herds will produce sires for the rest of the community. It does mean the use of good purebred sires that are bred for profitable production and that will increase the average production of the herd or flock. For example, the Iowa Experiment Station crossed some scrub cows, the scrubbiest they could get, with a purebred dairy bull. The grade heifers resulting from this cross produced 71 per cent

more milk and 42 per cent more butterfat than their scrub dams. Quality pays, and whether it be T-bone steak, butterfat, or bacon, the well-bred animal produces a better product at less expense than does his scrub competitor. It is surprising, too, what a very moderate outlay is required in breeding up a good grade herd of cattle, hogs, sheep, or poultry. The main essential is to decide what you really want to produce, and then breed consistently for it, not change breeds or types every 3 or 4 years.

The opportunity for increasing profits through better methods of feeding and care of livestock is fully as great as that of improving through better breeding. Balanced rations are best and home-grown feeds should be used as much as possible. Practical and well balanced home-grown rations can usually be worked out for South Dakota farms by including alfalfa, sweet clover and soy beans with the corn, oats, barley and other feeds commonly grown. It should be the aim in producing feeds for livestock to grow on the farm all of the roughage that is needed. It is good farm practice to carry over a surplus of feed from one year to the next. This is especially true in the western part of the state where hay is usually cheap, but in years of shortage becomes very scarce and high-priced. The practice of hogging-down corn, the use of self-feeders, and of concrete feeding-floors near the corn cribs, the piping of water to places that are convenient and easily accessible to the stock, the greater use of pasture crops, all of these things make for economy in labor and for lower production costs.

Enlarging Profitable Enterprises.— Very frequently some of the enterprises on the farm could be enlarged with profit. For example, one may be milking 3 or 4 cows when he could profitably be milking 8 or 10 cows. He may have 50 chickens, when 200 would be a money making sideline for him. He may be growing a cash crop on a small scale when this could well be increased and made a larger part of his farm business.

There are of course, some farms where the size of the business is already too large for economical handling. In these cases, some reduction in size and the addition of one or two sidelines may help to reduce costs on all of the enterprises.

Most South Dakota farms, however, will find their costs lessened by increasing the gross production rather than by decreasing it, especially if this can be done without increasing the acreage. The problem is not one of increasing or decreasing production as a whole, but of producing the amount that will show the lowest cost and the biggest profit for a particular farm.

Increasing Crop Yields.—Crop yields may be lower than those secured by the best farmers of the community. Where this is the case, careful study of the methods and practices employed by these more successful farmers will nearly always bring about increased profits. Most studies so far made indicate that the more prosperous farmers in most general farming communities actually do produce crops that yield from 15 to 25 per cent higher than the average. Some of the factors affecting crop yields are beyond the control of the farmer, but the growing of varieties that are adapted to the climate and and soil of the locality, the testing of seed grain, treatment for smut and early seeding will nearly always increase the acre yield.

A change in methods of production and crops grown would frequently make it possible to carry more stock on a given area of land than is now carried. This is especially true of the country west of the Missouri river where the amount of feed produced can often be materially increased by growing alfalfa, sweet clover, corn, etc., instead of depending so largely upon wild hay. Wherever the same feed can be grown on less land and with little or no additional labor, the taxes and interest or rental can usually be cut down and a direct and worthwhile saving be made.

Increasing Size of Farm.—There are many cases in South Dakota, though not so many in this state as in older states, where the farm is too small in size to bring the best return from the type of farming followed. This point must, however, be considered carefully, as all men are not personally able to manage the larger farms. On the other hand, there is a certain size of farm which best fits each principal type of farming. It should be the aim of the operator to secure by ownership or

rental enough land to make an economical unit. The farm that is too small has several disadvantages. It requires about the same machinery and other overhead expenses as the larger farm, but does not have as great an earning power.

It is also much more difficult to provide continuous work for men and horses on a small farm than it is on a larger one. When it is impossible to increase the size of the farm by buying or renting additional land, then the type of farming may be changed to one that is more intensive, and that will produce a larger gross income on the limited area.

MORE DIVERSIFICATION IS NEEDED ON MOST SOUTH DAKOTA FARMS

Diversification Stabilizes Income.—We have already seen that farms carrying on several enterprises are usually more profitable than those that depend upon only one or two sources of income. Farming in which the cash income is from several sources, such as wheat, butterfat, hogs, eggs, etc., is known as diversified farming as contrasted with farming which depends almost wholly upon one crop or enterprise for the income. There are instances where the one product farm is more profitable, but there are few of these under South Dakota conditions. For one thing, prices are not apt to be excessively low on all of the different products at the same time. Also, conditions may cause heavy losses in one line of production and not effect others seriously. The one or two enterprise farm is subject to rush seasons and slack times when labor cannot be used to advantage, while the diversified farm makes a more even and economical demand for labor. In view of these facts, the diversified farm is usually a more stable farm, protected against violent ups and downs; also, as will be shown below, diversification has much to do in reducing man labor and horse labor costs.

Diversification makes it possible to distribute the demand for labor fairly evenly throughout the year. A farm that makes small grain its chief source of income has an exceedingly heavy requirement for man and horse labor during April and May and again during July or August and September, but provides very little work for the months between these two

rush seasons of seed-time and harvest. A farm of this kind must keep enough horses to handle the work during the heaviest seasons, and this usually means a larger number of horses than would be required if the area in small grain were cut down a little and some other crop, such as corn, increased somewhat. Corn requires large amounts of work in May and June and again in October and November, so it fits in very well with wheat and other small grains.

Diversification Reduces Man and Horse Labor Costs— The total number of days or hours each horse works per year is an important factor. For example, suppose it costs $75 to keep a farm work horse for a year. If he works fifty 10-hour days or 500 hours per year, his labor costs 15 cents per hour. On the other hand, if the same horse works 110 days or 1100 hours the cost of keeping it will be very nearly the same, but the cost per hour for its work will be less than half as much, or 6.8 cents per hour. This gives a difference of 8.2 cents per hour in the cost of horse labor, depending upon the number of days' work the horse performs in a year. In growing an acre of corn, which requires about 45 hours of horse labor, this would make a difference of $3.69. These figures are not exact, and they will vary from farm to farm and from year to year, but they serve to show how important it is that horses be kept busy the most possible days per year.

Labor on a farm is of two kinds; that which is truly productive, such as caring for crops or livestock, and such work as repairing fences and currying horses, which is necessary and must be performed but does not add directly to the profits of the business. The income from the farm is more or less proportional to the number of days of productive work performed each year. This, in turn, is dependent upon the kinds of crops grown and the acreage of each, the amount and kinds of livestock kept, and the interrelation of these enterprises. All of the really productive work in raising crops and caring for livestock on some farms can be done in one hundred and sixty 10-hour days per year. Other farms are so organized that they provide 200 to 225 days of productive work per man per year. Since labor is such an important item of cost in

raising crops for sale or as feed for livestock, it should be used most efficiently and every effort made to so organize the business as to provide the most possible days of productive work each year. This does not mean, necessarily, making the farm work drudgery, but refers, rather, to providing more continous and regular work than most farms have.

OTHER IMPORTANT FACTORS INFLUENCING PROFITS

Operating Capital.—From the above discussion, it is evident that the reorganization of a farm may involve the investment of more capital than is now in use on the farm in question. It is very frequently true that the amount of operating or working capital is too small in proportion to the amount invested in land. By operating capital we mean the money invested in livestock, machinery, feed and supplies and cash to run the business. Some men are spoken of as "land poor". This means that they have invested too large a proportion of their capital in land and do not have enough money to equip and operate the farm in a way to make it yield the best returns. They are in much the same position as the merchant who has put all of his money into a store building, and does not have enough left to properly stock his shelves.

Where a farmer lacks sufficient operating capital, the problem is a difficult one. Without this capital, the handicap of very low farm income makes it difficult to save. On the other hand, interest rates on short term loans are usually high and constitute a considerable handicap to the man in this position. However, much operating capital is borrowed, and, if the farm operator borrows only for productive enterprises which in all probability will return the principal and interest plus a profit by the time settlement must be made, such borrowing will usually be justified. Too frequently, however, such borrowed capital or the income produced by it, is allowed to be dissipated for personal living expenses, thus involving the borrower still more deeply. For safety, the undercapitalized operator should probably undertake first such enterprises as can be entered without great outlay of capital, instead of the larger and more speculative enterprises.

Operating Expenses.—While, as previously mentioned, low profits result more frequently from too low a gross income than from excessive expenditure, there are, nevertheless, points on nearly every farm where expenses can be cut down if careful study is given to the record. The following points should have careful consideration:

(a) Is more help or more expensive help being hired than would be necessary if the farm business were well organized?

(b) Is labor saving machinery being used as much as it should be?

(c) Is the machinery expense greater than it should be as a result of improper care or from use of more expensive machinery than is justified for the farm in question?

(d) Are more horses kept than are absolutely necessary?

(e) Are high-priced mill feeds being bought when home-grown feeds would do as well?

(f) Are expensive improvements being made that the size of the business will not justify?

Market Trends and Fluctuations Merit More Attention.—Farmers will be well repaid for time spent in studing the markets and price trends. It is a well-known fact that the hog and cattle markets are subject to periods of over and under production that greatly influence prices and profits. When hog prices are good many farmers go into the hog business on a large scale, only to find that their neighbors all over the country have done the same thing. Or they go heavily into dairy cattle or beef cattle at a time when these products are high and find when they get well established in them that prices have struck a low level for a few years. The old rule that it pays to get into a business while it is in a depression usually works out best, although that is never the time when that particular business appears most attractive.

The growers of cash crops can profitably keep more closely in touch with the supply and demand outlook for these crops. This is especially true of a crop like potatoes, where a heavy crop usually means especially low prices and a short crop means, ordinarily, very high prices. In these cases, early selling usually gets the most for the crop which has a very heavy

production throughout the country while in the case of a short crop the later market is usually the best one on which to sell.

In this circular discussion is limited to those things which a farmer may undertake for himself. There are, of course, many problems concerning his business which can best be solved by cooperation between himself and his neighbors. For example, practically every grower, especially of cash crops such as potatoes, will be well repaid for time spent in grading his products and putting them in shape to meet the requirements of the market. Methods of steadying the flow of farm products onto the markets, the avoidance of gluts and similar problems must be solved largely through cooperative effort.

Variation in Costs.—An outstanding fact shown by all cost studies is that production costs vary greatly between different farms in the same community. These studies show that some men will use to produce 100 pounds of pork, as much as 786 pounds of grain and 304 pounds of skim milk, while neighbors of theirs will produce it with 308 pounds of grain and 204 pounds of skim milk. One farm may produce wheat at a cost of 65 cents a bushel, and the next farm to it may have an expense of $2. or $3. a bushel. It is desirable that as fast as possible growers come to know what the costs of their principal products are, and wherever these are excessively high to consider means of lowering them. Ways of lowering costs usually include many of the methods and principles mentioned above, such as increasing yield per acre, efficient use of man and horse labor, concentration of effort on productive labor as compared to miscellaneous labor, and diversification of enterprises.

A farmer will not always be able to adopt a new method and make an outstanding success of it from the beginning. If he decides that he should grow alfalfa, but has never grown any, he may have to make one or two trials before he gets to handling it successfully. If he decides that he could increase his profits by growing soy beans in his corn, he may have to make one or two attempts before he masters the art of growing them. The same is true of nearly all new methods, and one should not be discouraged if it takes considerable time to work out the reorganization of his farm.

HOW TO SUMMARIZE THE RECORD

To summarize the account book or make out a business summary, we total the inventories for the beginning, and also for the end of the year. This gives us the total value of the livestock, crops, feed and supplies on hand at the beginning and end of the year. If to the CLOSING INVENTORY (end of year) we add the TOTAL SALES or RECEIPTS and from this sum substract the OPENING INVENTORY (beginning of year) and the value of livestock purchased during the year, we have the GROSS FARM INCOME or GROSS PROFITS.

To arrive at the NET FARM INCOME or NET FARM PROFIT we substract certain EXPENSES and DEPRECIATION CHARGES from the GROSS FARM INCOME. The items of EXPENSE which we deduct are those for:

(a) FEED PURCHASED

(b) LABOR HIRED

(c) REPAIRS ON PERMANENT IMPROVEMENTS

(d) REPAIRS ON MACHINERY

(e) OTHER FARM EXPENSES (such as taxes, insurance, rent, interest, and miscellaneous expenses not classified above.)

(f) DEPRECIATION on FARM PROPERTY and on FARM MACHINERY. (This is an attempt to charge off as EXPENSE each year the wear and tear on buildings and machinery. The per cent of DEPRECIATION that is charged depends upon the useful life of the building or machine. For instance, if a wagon lasts 20 years, then 5 per cent of the original cost is charged off each year.)

The NET FARM INCOME is really made up of three parts, or, rather, should be attributed to three sources:

(a) The labor of the operator and his skill as a manager,

(b) Unpaid family labor, and

(c) Return on the capital invested.

If you substract from the NET FARM INCOME the estimated value of the family labor and 5 per cent interest on the

capital actually owned, we have left an amount which we call LABOR INCOME. This is what the farmer actually receives for his labor and his skill as a manager of the business.

NET FARM INCOME is the amount which the Commissioner of Internal Revenue uses in figuring one's income tax. LABOR INCOME is a term used most frequently in farm management discussions. It enables us to compare the management of one farm with that of another, and with the average of a group of farms.

A FARM BUSINESS RECORD FOR 1921

The following pages were copied from a South Dakota farm record for 1921. Some changes were made, but the record is substantially that of an actual farm. A simple farm account book, such as was used by this farmer, is sold at cost by the Extension Service, South Dakota State College.

FOOTNOTE.—Some of the terms in this narrative are not used in the strict farm management sense, but are adapted to fit the farm account book now in use in the state. For instance, net farm income is here used to mean family income.

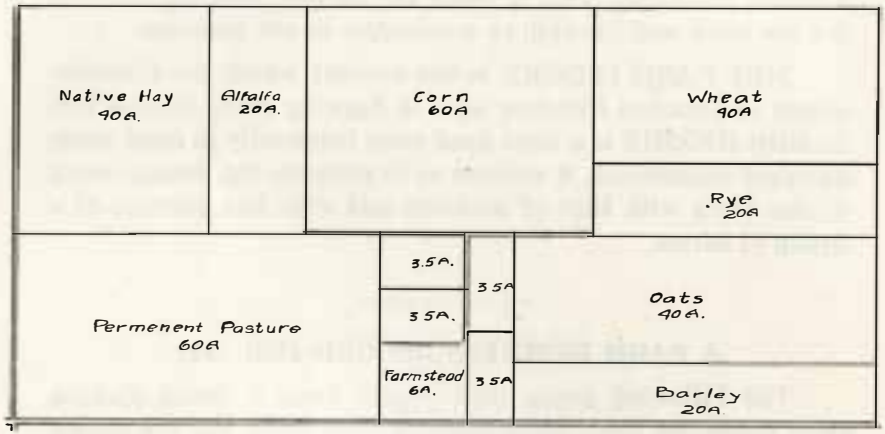
CROP RECORD, ACRES AND YIELDS OF CROPS

Crops Grown	Acres	Yield per acre	Total Yield
Corn for grain	50	35	1750
Corn for silage	10	7.2	72
Wheat	40	14	560
Barley	20	26	520
Oats	40	30	1200
Rye	20	26	520
Alfalfa hay	20	1.5	30
Mixed hay	40	.75	30

FARM AREA

Total acres in crops (from above)	240
Permanent pasture (not woods)	60
Barn lots, garden, roads, waste, etc.	20
Total acres in farm	320

PLAT OF FARM



SALES OF CROPS

Date	Kind and Quantity of Crop Sold	Amt. Rec'd
	CORN	
2-10	300 bu. @ 40c	$120.00
3- 5	340 bu. @ 40c	136.00
	Total	256.00
	OATS	
6- 8	30 bu. @ 25c	$ 7.50
8- 2	170 bu. @ 25c	42.50
	Total	50.00
	WHEAT	
6- 8	70 bu. @ $1.25	$ 87.50
9-24	110 bu. @ $1.20	132.00
10-15	100bu. @ $1.15	115.00
11- 4	50 bu. @ $1.05	52.50
	Total	387.00

SALES OF CROPS (Continued)

Date	Kind and Quantity of Crop Sold	Amt. Rec'd
8- 6	Sold 216 bu. barley @ 40c	$ 86.40
11-23	200 bu. rye @ 85c	170.00
12-13	270 bu. rye @ 87c	234.90
	Total	491.30

CATTLE

Date	Details of Transaction	Purchases	Sales
6-27	Bought 2 cows	$180.00	$
8-10	Sold 5 cows		250.00
10-10	Sold 11 steers		704.00
	Total	180.00	954.00

SALES OF DAIRY PRODUCTS

(Butter traded for groceries, etc., should be entered as cash sales.)

Date	Kind and Quantity of Products Sold Pounds Butterfat	Amt. Rec'd	Date	Kind and Quantity of Products Sold Pounds Butterfat	Amt. Rec'd
1- 3	27.3 " " @ 43c	$ 11.74		Amt. Brot. Fwd.	$453.26
1-12	51 " " @ 43c	21.93	7-22	30.6 " " @ 34c	10.40
1-17	28.3 " " @ 43c	12.17	7-25	21.9 " " @ 35c	7.67
1-27	56.5 " " @ 43c	24.30	7-27	13.5 " " @ 37c	5.00
2- 8	51.1 " " @ 43c	21.97	8- 3	17 " " @ 39c	6.63
2-15	44.9 " " @ 38c	17.06	8- 8	12 " " @ 38c	4.56
2-23	46.5 " " @ 42c	19.53	8-15	24 " " @ 38c	9.12
3- 1	27 " " @ 46c	12.42	8-19	14.4 " " @ 36c	5.18
3- 5	18 " " @ 46c	8.28	8-23	17.4 " " @ 36c	6.26
3-10	22.5 " " @ 46c	10.35	8-27	17.7 " " @ 32c	5.66
3-17	30.2 " " @ 48c	14.50	9- 2	20.4 " " @ 32c	6.53
3-25	38.5 " " @ 43c	16.56	9- 7	17 " " @ 32c	5.44
3-31	25.4 " " @ 40c	10.16	9-16	26.5 " " @ 37c	9.81
4- 7	28.5 " " @ 42c	11.97	9-26	29.5 " " @ 37c	10.92
4-13	25.7 " " @ 40c	10.28	9-29	11.5 " " @ 37c	4.26
4-21	39.1 " " @ 35c	13.69	10- 3	18.5 " " @ 37c	6.85
4-29	40.9 " " @ 30c	12.27	10- 7	15.9 " " @ 40c	6.36
5- 6	69.5 " " @ 27c	18.77	10-17	37.8 " " @ 40c	15.12
5-13	67.6 " " @ 25c	16.90	10-24	29.9 " " @ 40c	11.96
5-21	85.7 " " @ 25c	21.43	10-31	27.6 " " @ 41c	11.32
5-27	76.6 " " @ 21c	16.09	11- 9	51.1 " " @ 40c	20.44
6- 8	151.9 " " @ 21c	31.90	11-16	41.8 " " @ 38c	15.88
6-15	84.6 " " @ 24c	20.30	11-23	39.4 " " @ 38c	14.97
6-22	72.8 " " @ 26c	18.93	11-26	18.9 " " @ 36c	6.80
6-29	66.7 " " @ 28c	18.68	12- 5	56.5 " " @ 36c	20.34
7- 2	26.3 " " @ 28c	7.36	12-12	34.9 " " @ 36c	12.56
7- 7	39.5 " " @ 31c	12.25	12-21	55 " " @ 36c	19.80
7-12	35.4 " " @ 33c	11.68	12-24	20.5 " " @ 33c	6.77
7-16	28.8 " " @ 34c	9.79	12-29	34.2 " " @ 33c	11.29
	Amt. Fwd.	$453.26		Total	$731.16

HOGS

Date	Details of Transaction	Purchases	Sales
1-27	Sold 22 hogs	$	$347.19
11-19	Sold 35 hogs		560.00
11-26	Bought 1 boar	30.00	
12-21	Sold 1 hog		20.00
	Total	30.00	927.19

HORSES AND SHEEP
(No Purchases or Sales)

POULTRY PURCHASES AND SALES

Date	Details of Transaction	Purchases	Sales
11- 9	Sold roosters		$ 94.36
	Total		94.36

SALES OF EGGS

Date	Quantity and Price	Amt. Rec'd	Date	Quantity and Price	Amt. Rec'd
				Amt. Bro. Fwd.	$57.22
1- 2	8 doz. @ 45c	$ 3.60	3- 5	36 doz. @ 25c	9.00
1-12	11 doz. @ 40c	4.40	3-10	36 doz. @ 26c	9.36
1-17	12 doz. @ 50c	6.00	3-17	36 doz. @ 19c	6.84
1-20	9 doz. @ 50c	4.50	3-19	18 doz. @ 19c	3.42
1-27	20 doz. @ 42c	8.40	3-31	60 doz. @ 20c	12.00
2- 8	30 doz. @ 25c	7.50	4-13	60 doz. @ 19c	11.40
2-10	10 doz. @ 20c	2.00	4-21	60 doz. @ 19c	11.40
2-15	24 doz. @ 21c	5.04	4-29	72 doz. @ 16c	11.52
2-23	36 doz. @ 23c	8.28	5- 6	36 doz. @ 14c	5.04
3- 1	30 doz. @ 25c	7.50	5-16	72 doz. @ 20c	14.40
	Carried Fwd.	57.22		Carried Fwd.	151.60

SALES OF EGGS (Continued)

Date	Quantity and Price	Amt. Rec'd
	Amount Brought Forward	$151.60
5-18	48 doz. @ 15c	7.20
5-27	72 doz. @ 16c	11.52
6- 8	68 doz. @ 19c	12.92
6-17	36 doz. @ 20c	7.20
6-22	36 doz. @ 20c	7.20
6-28	36 doz. @ 19c	6.84
7- 7	30 doz. @ 22c	6.60
7-12	36 doz. @ 19c	6.84
7-16	39 doz. @ 19c	7.41
7-25	51 doz. @ 20c	10.20
8-15	54 doz. @ 25c	13.50
8-23	36 doz. @ 25c	9.00
9- 2	33 doz. @ 25c	8.25
9-12	36 doz. @ 22c	7.92
9-24	36 doz. @ 29c	10.44
10- 3	9 doz. @ 30c	2.70
10-23	33 doz. @ 42c	13.86
11- 4	12 doz. @ 40c	4.80
11-16	20 doz. @ 45c	9.00
12-13	16 doz. @ 47c	7.52
	Total Egg Sales	$322.52

MISCELLANEOUS RECEIPTS

Date	Details of Transaction	Amt. Rec'd
3- 7	Rec'd. supervisor's fees	$ 12.00
6-27	Road overseer and supervisor's fees	34.00
8- 3	Farmers elevator dividends	71.68
	Total	117.68

EXPENSES—FEED BOUGHT

Date	Kind and Quantity of Feed Bought	Amt. Rec'd
1-12	400 lbs. shorts @ $2 per cwt.	$ 8.00
1-12	1 ton of tankage	90.00
11- 9	500 lbs shorts @ $1.75 per cwt.	8.75
11- 9	1 ton of tankage	87.00
	Total	193.75

EXPENSES—LABOR

Date	Details of Transaction	Amt. Pd.
1-31	Edward Hanson, labor	$ 20.00
2-28	" " "	20.00
3-31	" " "	20.00
4-30	" " "	40.00
5-31	" " "	40.00
6-30	" " "	40.00
7-30	" " "	40.00
8-31	" " "	40.00
9-30	" " "	40.00
10-31	" " "	40.00
11-30	" " "	40.00
12-31	" " "	20.00
	Total	400.00

MACHINERY EXPENSE

Date	Details of Transaction	New Mach.	Repairs
2-10	Bought manure spreader	$175.00	
2-15	Repairs on windmill		2.85
3-25	Drill repairs		7.10
4-23	Blacksmith work		3.00
4-29	Hinges, bolts, etc.		1.75
5-30	Casing for Ford		15.00
6- 8	Repairs for mower		5.35
7- 2	Pitchfork		1.75
7- 2	Reset wagon tires (blacksmith)		3.00
7- 7	Ford parts		3.60
7-12	Binder labor and repairs		2.60
8- 8	Having repairs		12.80
8-15	Blacksmith		2.00
8-19	Repairs for Ford		1.50
8-23	Hammer		1.75
9-12	Auto repairs		8.00
10-15	Sharpening plow shares		14.00
12-13	Blacksmith		5.00
	Total	$175.00	$91.05

OTHER FARM EXPENSES

Date	Details of Transaction	Amt. Pd.
1- 5	Paid telephone rent 3 mos.	$ 3.75
1- 8	Bought license for Ford car	6.00
1-27	6 gal. gas @ 30c	1.80
2-19	7 gal. gas @ 30c	2.10
3- 1	Separator oil	1.15
3- 5	10 gal. gas	3.00
3-10	6 gal. gas	1.80
3-17	Oiling and repairing harness	9.00
3-19	First half of taxes	125.31
3-19	Hail insurance	48.00
4- 1	Telephone rent 3 mos.	3.75
4- 7	50 gal. gas	13.00
4- 7	5 gal. oil	3.75
5- 7	Fire insurance assessment	7.00
6-22	Barrel of salt	3.00
6-22	Paris Green	1.00
7- 1	Telephone rent 3 mos.	3.75
7- 2	250 lbs. of twine @ 16½c	41.52
7- 2	Paint	8.30
7- 2	Rope	2.40
7-16	Flynets and oilcans	5.60
7-16	50 gal. gas	12.50
8- 3	5 gal. oil	3.00
8- 3	25 lbs. axle grease	1.85
8- 3	Veterinarian	8.00
8-23	Hog powder, 400 lbs.	35.00
9-26	50 gal. gas	13.50
10- 1	Telephone rent 3 mos.	3.75
10-10	Threshing bill	265.20
10-10	Pay for silo filling	45.00
10-27	Last half of taxes	125.31
11- 4	Halter	1.25
11- 9	Salt	3.50
12-13	Interest on mortgage	384.00
12-15	Newspaper advertising	1.70
12-31	Subscription for farm papers	4.00
	Total	1202.27

DEPRECIATION ACCOUNT OF FARM PROPERTY

Kind of Property	Date Acquired	Cost or Market Value March 1st, 1913, Plus Cost of New Improvements up to beginning of Taxable Year	Total Cost of New Improvements Made During Taxable Year	Rate of Depreciation	Amount of Depreciation Claimed for Taxable Year	Depreciation Sustained Prior to Taxable Year	Total Depreciation Sustained to End of Taxable Year
		$	$	%	$	$	$
Barn	1916	1400.00		4	56.00	224.00	280.00
Silo	1918	480.00		8	38.40	115.20	153.60
Corn Crib	1918	100.00		4	4.00	12.00	16.00
Granary	1916	200.00		4	8.00	40.00	48.00
Hog House	1914	300.00		5	15.00	90.00	105.00
Hen House	1919	300.00		4	12.00	24.00	36.00
Machine Shed	1916	150.00		4	6.00	24.00	30.00
Fencing	1918	360.00		10	36.00	108.00	144.00
Tiling							
Open Ditches							
Total Buildings, Fencing, Tiling					175.40		
Column	1	2	3	4	5	6	7

DEPRECIATION ACCOUNT OF FARM MACHINERY

Machine and Description	Date Acquired	Cost or Market Value March 1st, 1913, Plus Cost of New Improvements up to beginning of Taxable Year	Total Cost of New Machinery Purchased During Taxable Year	Rate of Depreciation	Amount of Depreciation Claimed for Taxable Year	Depreciation Sustained Prior to Taxable Year	Total Depreciation Sustained to End of Taxable Year
Wagon	1914	$ 80.00	$	5%	$ 4.00	$ 28.00	$ 32.00
Wagon	1914	80.00		5	4.00	28.00	32.00
Buggies	1910	70.00		5	3.50	28.00	31.50
Auto	1918	400.00		20	80.00	240.00	320.00
Cutter							
Sled	1914	30.00		6	1.80	10.80	12.60
Walking Plow	1914	20.00		6	1.20	8.40	9.60
Gang Plow (2)	1914	120.00		7	8.40	58.80	67.20
Sulky Plow							
Disc Harrow	1920	75.00		6	4.50	4.50	9.00
Spike-Tooth Harrow	1914	15.00		8	1.20	8.40	9.60
Roller							
Corn Planter	1914	30.00		8	2.40	16.80	19.20
1-Row Cultivator	1916	54.00		8	4.32	21.60	25.92
2-Row Cultivator	1917	110.00		8	8.80	35.20	44.00
Corn Binder ½ Int.	1914	62.50		10	6.25	43.75	50.00
Ensilage Cutter ½ Int.	1918	70.00		10	7.00	21.00	28.00
Corn Elevator							
Corn Sheller							
Grain Binder	1914	135.00		8	10.80	75.60	86.40
Fanning Mill	1919	50.00		5	2.50	5.00	7.50
Seeder							
Grain Drill	1914	100.00		7	7.00	49.00	56.00
Hay Loader							
Mower	1914	45.00		8	3.60	25.20	28.80
Hay Rake							
Side delivery Rake or Tedder							
Stacking Outfit	1916	60.00		10	6.00	30.00	36.00
Manure Spreader	1921		175.00	12	21.00		
Feed Grinder							
Potato Machinery							
Orchard Sprayer							
Gasoline Engine	1918	75.00		8	6.00	18.00	24.00
Threshing Machine							
Tractor							
Tractor Equipment							
Double Harness	1914	180.00		6	10.80	75.60	86.40
Double Light Harness							
Single Harness							
Hog Equipment							
Cream Separator	1914	40.00		10	4.00	28.00	32.00
Other Tools	1918	100.00		10	10.00	30.00	40.00
Totals		2001.50			219.07	889.65	
Column	1	2	3	4	5	6	7

INVENTORY OF FEED, SEEDS AND SUPPLIES

Item	On Hand 1st of Yr. Quantity	Price	Value	On Hand End of Yr. Quantity	Price	Value
Corn	1500	$ .50	$750.00	1800	$ .30	$540.00
Wheat	120	1.45	174.00	300	1.00	300.00
Oats	1500	.30	450.00	1200	.24	288.00
Rye	25	1.15	28.75	50	.60	30.00
Barley	300	.50	150.00	250	.35	87.50
Hay—Alfalfa	18	10.00	180.00	18	10.00	180.00
Timothy						
Cowpea						
Soybean						
Mixed	22	5.00	110.00	30	5.00	150.00
Silage	45	3.00	135.00	45	3.00	135.00
Fodder						
Straw						
Cottonseed Meal						
Oil Meal						
Tankage	400	4.50	18.00	600	4.35	26.10
Bran						
Shorts	100	2.00	2.00	200	2.25	4.50
Other Concentrates						
Seeds—Corn	10	3.00	30.00	12	3.00	36.00
Soybeans						
Cowpeas						
Clover						
Timothy						
Alfalfa						
Potatoes						
Lime						
Fertilizer						
Clover						
Totals			653.75			649.10

INVENTORY OF LIVE STOCK

Names or Number of Animals	Beginning of Year Number	Value	End of Year Number	Value
Cattle—Cows	14	$700	14	$840
Heifers	3	75	4	110
Calves	13	130	14	168
Steers	11	319	9	306
Bulls	1	125	1	125
Total Cattle		$1349		$1549
Hogs —Market	22	330	19	228
Breeding Stock	10	200	16	320
Total Hogs		$530		$548
Horses—	8	800	8	800
Colts			2	80
Total Horses		$800		$880
Poultry	150	90	140	105
Total Poultry		$90		$105

FARM BUSINESS SUMMARY

	Inv. Beg. of Year	Total Bought	Total Sales	Inv. at End Year.
Crops—Corn	$750.00		$256.00	$540.00
Oats	450.00		50.00	288.00
Wheat	174.00		387.00	300.00
Other Crops	653.75		491.30	649.10
Livestock—Cattle	1349.00	180.00	954.00	1549.00
Dairy Products			731.16	
Hogs	530.00	30.00	927.19	
Horses	800.00			880.00
Sheep				
Poultry	90.00		94.36	105.00
Eggs			322.52	
Miscellaneous Receipts			117.68	
Totals	4796.75	210.00	4331.21	4859.10
Column	1	2	3	4

SUMMARY OF INCOME AND EXPENSE COMPUTED ON AN ACCRUAL BASIS

1. Inventory of livestock, crops, etc., at end of year (Column 4 above)	$4859.10	
2. Sales of livestock, crops, etc., during year (Column 3, above)	4331.21	
3. Total		$9190.31
4. Inventory of livestock, crops, etc., at beginning of year (Column 1, above)	4796.75	
5. Cost of livestock, crops, etc., purchased during year (Column 2, above)	210.00	
6. Total		5006.75
7. Gross profits (Substract item 6 from item 3)		4183.56
Deductions—		
8. Expenses—Feed purchased	193.75	
9. Labor hired	400.00	
10.		
11. Other farm expenses	1202.27	
12. Repairs on permanent improvements		
13. Repairs on machinery	91.05	
14. Depreciation—Farm property	175.40	
15. Farm machinery	219.07	
16. Total (Item 8-15)		2281.54
17. Net farm profit (Substract item 16 from item 7)		1902.02

STATE COLLEGE SCHOOL OF PRINTING PRESS